

WHAT IS CLAIMED IS:

1. A video data processing device comprising:

a degree of coding difficulty computing means for computing the degree of coding difficulty from the input video data;

a filtering means for adaptively filtering said input video data on the basis of the degree of coding difficulty computed from said input data;

a compression-coding means for compression-coding said input and filtered video data;

a decoding means for decoding said compression-coded video data;

a degree of coding difficulty computing means for computing the degree of coding difficulty from said decoded video data; and

an image quality correcting means for adaptively correcting the image quality of said decoded video data on the basis of the degree of coding difficulty computed from said decoded video data.

2. The video data processing device according to claim 1, wherein said degree of coding difficulty computing means comprises a motion compensation remaining difference computing means for computing the motion compensation remaining difference from the video data and computes the degree of coding difficulty on the basis of the motion compensation remaining difference computed by said motion compensation remaining difference computing means.

3. The video data processing device according to claim 1, wherein said degree

of coding difficulty computing means comprises a motion vector difference computing means for computing the difference of motion vectors in adjacent block and computes the degree of coding difficulty on the basis of the motion vector difference computed by said motion vector difference computing means.

4. The video data processing device according to claim 1; wherein said degree of coding difficulty computing means comprises a motion compensation remaining difference computing means for computing the motion compensation remaining difference and a motion vector difference computing means for computing the difference of motion vectors in adjacent block and computes the degree of coding difficulty on the basis of the motion compensation remaining difference computed by said motion compensation remaining difference computing means and the motion vector difference computed by said motion vector difference computing means.

5. The video data processing device according to claim 2, wherein said motion compensation remaining difference computing means computes the motion compensation remaining difference on a block by block basis.

6. The video data processing device according to claim 2, wherein said motion compensation remaining difference computing means computes the motion compensation remaining difference on a scene by scene basis.

7. The video data processing device according to claim 2, wherein said motion compensation remaining difference computing means comprises a means for computing the motion compensation remaining difference on a block by block basis

and a means for computing the motion compensation remaining difference on a scene by scene basis.

8. The video data processing device according to claim 3, wherein said motion vector difference computing means computes the motion vector difference on a block by block basis.

9. The video data processing device according to claim 3, wherein said motion vector difference computing means computes the motion vector difference on a scene by scene basis.

10. The video data processing device according to claim 3, wherein said motion vector difference computing means comprises a means for computing the motion vector difference on a block by block basis and a means for computing the motion vector difference on a scene by scene basis.

11. The video data processing device according to claim 1, wherein said filtering means adaptively performs a filtering operation on the basis of the coding compression ratio and the degree of coding difficulty as computed from said input video data.

12. The video data processing device according to claim 1, further comprising:  
a recording/reproduction means for recording/reproducing compression-coded video data by way of a recording medium; and

said decoding means being adapted to decode the video data reproduced from said recording medium by said recording/reproduction means.

13. A video data processing method comprising steps of:  
computing the degree of coding difficulty from the input video data;  
adaptively filtering said input video data on the basis of the degree of coding difficulty computed from said input data;  
compression-coding said input and filtered video data;  
decoding said compression-coded video data; and  
computing the degree of coding difficulty from said decoded video data; and  
adaptively correcting the image quality of said decoded video data on the basis of the degree of coding difficulty computed from said decoded video data.

14. The video data processing method according to claim 13, wherein the motion compensation remaining difference is computed from the video data in said degree of coding difficulty computing step and the degree of coding difficulty is computed on the basis of the computed motion compensation remaining difference.

15. The video data processing method according to claim 13, wherein the difference of motion vectors in adjacent block is computed from the video data in said degree of coding difficulty computing step and the degree of coding difficulty is computed on the basis of the computed motion vector difference.

16. The video data processing method according to claim 13, wherein the motion compensation remaining difference and the difference of motion vectors in adjacent block are computed from the video data in said degree of coding difficulty computing step and the degree of coding difficulty is computed on the basis of the



coding difficulty from said decoded video data; and

an image quality correcting means for adaptively correcting the image quality of said decoded video data on the basis of the degree of coding difficulty computed from said decoded video data and the compression ratio.

20. A video data processing method comprising steps of:

computing the degree of coding difficulty from the input video data;

adaptively filtering said input video data on the basis of the degree of coding difficulty computed from said video data and the compression ratio;

compression-coding said input and filtered video data;

decoding said compression-coded video data;

computing the degree of coding difficulty from said decoded video data; and

adaptively correcting the image quality of said decoded video data on the basis of the degree of coding difficulty computed from said decoded video data and the compression ratio.

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